An official website of the United States government Here's how you know

We have deliberately taken some of our webpages offline in order to comply with **Executive Orders and OSD Policy**

Army scientists train Soldiers on how to leverage AI technologies

By U.S. Army DEVCOM Army Research Laboratory Public Affairs May 19, 2025

[https://api.army.mil/e2/c/images/2025/05/19/e23c3aa6/original.jpg]

ADELPHI, Md. — A cohort of 25 Soldiers and three civilians mastered the fundamentals of artificial intelligence and machine learning as part of a special course taught by experts at the U.S. Army Combat Capabilities Development Command Army Research Laboratory, also known as DEVCOM ARL [https://arl.devcom.army.mil/].

Mid-career Army officers, warrant officers and non-commissioned officers traveled from across the nation to attend the course. The goal was for participants to finish the course with an in-depth understanding of how they might leverage AI for their particular role in the Army.

> **“The instructors did a phenomenal job breaking down complex concepts like convolutional layers, generative adversarial networks and transformer models into digestible lessons, even for non-technical folks,” said Capt. Nathan Jackson, an active-duty air defense artillery officer stationed at Fort Knox, Kentucky. “I now see clear opportunities for AI to support everything from predictive modeling of officer career paths to optimizing air defense planning.”**

This course, led by DEVCOM ARL researchers Dr. Mark Tschopp and Dr. Reginald Hobbs and Maj. Matt Work from the U.S. Army Futures and Concepts Center [https://www.army.mil/futuresandconceptscenter], represents one way that DEVCOM ARL prepares Soldiers for a future operating environment dominated by artificial intelligence.

“AI holds the extraordinary potential to swiftly analyze the deluge of data present within the future battlefield and to deliver actionable insight to Soldiers at the speed of relevance,” Tschopp said. “We want this course to equip Soldiers with the knowledge and decision-making capabilities to harness AI as a tool to gain a competitive edge over our adversaries.”

ARL launched the Artificial Intelligence for Soldiers course as part of the Army G-3/5/7’s Strategic Broadening Seminar program in 2024 to provide Soldiers with a unique learning opportunity in a critical technology domain.

The course features classroom seminars, guest lectures by Army leaders, tours of ARL research facilities and close-up demonstrations of the laboratory’s latest AI and robotics technology.

[https://api.army.mil/e2/c/images/2025/05/19/43284928/original.jpg]

During the span of one week, course participants were provided a wealth of information that not only illuminated how AI systems work but also highlighted AI's nature as a tool with real limitations and specialized applications. Once the course established a solid foundational understanding of AI and ML for the participants, the program coordinators demonstrated to the Soldiers the various ways that Army researchers have implemented AI in Army technology so far.

"It was fascinating to learn where AI opportunities are being explored and what AI limitations that scientists are trying to overcome," said Maj. Mathew Miller, Army acquisition officer. "I was most impressed with where ARL scientists are applying AI now. I feel much more empowered to approach industry on the topic of AI, and I hope to reach out to ARL scientists in the future as a resource for attacking acquisition challenges."

The course concluded on Friday with capstone presentations by the participants to Army senior leaders. Each team showcased what they had learned and proposed a new AI-driven capability that would address a future Army need.

U.S. Army's Director of Strategy, Plans and Policy Maj. Gen. Stephanie Ahern congratulated the course participants for their growth and stressed the importance of continued education and engagement in this technology space.

"This course was about developing you all—as some of the Army's rising leaders—to meet the challenges ahead," Ahern said. "Your ability to work with experts who are working with AI every day and your ability to apply AI in the field are extremely essential to the Army mission. Please continue to be an agent of change; you are a part of the solution, and you are not in it alone."

The U.S. Army Combat Capabilities Development Command Army Research Laboratory [https://arl.devcom.army.mil/], known as DEVCOM ARL, is the Army's research laboratory. Nested strategically within DEVCOM and the Army Futures Command, ARL's mission is to Operationalize Science. ARL identifies and executes disruptive research leading to scientific discovery and emerging technologies for Army continuous transformation. A hallmark of ARL's mission is collaborative partnerships to broaden Army access to expert talent and accelerate transitions of science-enabled capabilities. For information, visit https://arl.devcom.army.mil/ [https://arl.devcom.army.mil/].